



Oregon

Theodore R. Kulongoski, Governor

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September 23, 2004

Gary Honeyman
Manager, Environmental Remediation
Union Pacific Railroad Company
221 Hodgeman
Laramie, WY 82072

RE: Conditional No Further Action Determination
UPRR St John's Tank Farm, ECSI # 2017

Dear Mr. Honeyman:

The Department of Environmental Quality (DEQ) received a copy of the August 17, 2004 recorded Easement and Equitable Servitude for the Union Pacific Railroad (UPRR) St John's Tank Farm property. This completes our review and oversight of the site investigation and cleanup activities. DEQ has determined that no further action is warranted. The no further action determination is a result of our evaluation and judgment based on the regulations and facts as we now understand them including the following.

1. The UPRR site is approximately 2.6 acres on the east side of the Port of Portland Terminal 4 (11040 N Lombard Street) in Portland, Oregon. Bunker C and later diesel fuel were handled at the facility, which included two 55,000-barrel above ground storage tanks (ASTs), fuel-loading equipment at the railroad tracks, and associated structures and equipment. Fuel-loading operations ceased in 1983 and the tank farm ASTs (Tank 1 and Tank 2) were removed from the site in 1986. Petroleum hydrocarbons were detected in soil at the site during the AST removal activities.
2. UPRR signed a Letter Agreement with the Voluntary Cleanup Program in March 2000 for DEQ oversight of additional investigation and cleanup at the facility.
3. UPRR conducted several phases of site investigation between 2001 and 2004. Investigations included shallow soil sampling, soil borings, and groundwater monitoring well installation and sampling. The contaminants of concern were total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and metals. Soil contamination was identified at several site features including a heating oil underground storage tank (UST), a 55-gallon drum associated with the railroad drip pan system, a concrete stormwater collection sump, and surface soil in the two AST areas. PAHs were detected in surface soils across the site, possibly from long-term deposition of railcar diesel exhaust. Soil contamination was also identified in the railcar loading area from an unknown source, but likely from stormwater sump overflows, railcar releases, or other activities on adjacent Port of Portland property. In 2000 the Port of Portland completed a remedial investigation for petroleum releases associated with the pipelines used to transfer product from Terminal 4 Slip 3 to the UPRR St. John's Tank Farm facility.

4. Groundwater investigations indicated that there were only minor impacts to groundwater. TPH was detected below 1 mg/L in the UPRR groundwater monitoring wells and PAHs were detected in some wells but below tap water EPA Region 9 Preliminary Remediation Goals (PRGs). Total metals were elevated in some samples compared to the tap water PRGs; however, there was no identified on-site beneficial use of shallow groundwater. Beneficial use is limited to recharge to surface water approximately 860 feet west of UPRR at the Willamette River. A stormwater pipeline from the facility was closed to prevent potential future migration of surface water runoff into the Terminal 4 drainage system that discharges to the Willamette River at Slip 3. With closure of the stormwater pipe, there is no complete migration pathway from surface soil to the Willamette River.
5. UPRR conducted removal actions to address petroleum and lead contaminated soil as follows:
 - 1986 - 300 yds³ of petroleum-contaminated soil from the tank farm area.
 - 2001 - 65 yds³ of petroleum-contaminated soil from the UST area.
 - 22 yds³ of petroleum-contaminated soil from the sump area.
 - 2002 - 100 yds³ of Bunker C and soil from the southwest corner of the Tank 2 area.
 - 2003 - 64 yds³ of lead-contaminated soil from the Tank 1 and Tank 2 areas.
6. Following removal actions, soil data were compared to risk-based concentrations (RBCs) derived from the PRGs. Benzo(a)pyrene and dibenz(a,h)anthracene, which are carcinogenic PAHs, exceeded PRGs for standard occupational worker exposure in surface soil in the tank farm area and track area. Because the UPRR property is not an active industrial facility with exception of occasional railcar activities, site-specific RBCs were calculated for an intermittent railroad track or site maintenance worker. This scenario assumes a worker is only on site for 4 hours, one day a week. PAHs were below the calculated site-specific RBCs for this scenario.
7. Ecological risk was evaluated following the soil removals in 2002 and 2003. The main ecological concern was bird exposure to lead in surface soils. Because birds are mobile and forage over an area rather than at one location, DEQ approved using the 90% Upper Confidence Limit (UCL) of the soil data for assessing the risk to birds. The 90 % UCL was 77 mg/kg lead. This is below the DEQ Screening Level Value (SLV) of 80 mg/kg (5x the 16 mg/kg SLV for threatened and endangered species).
8. An Easement and Equitable Servitude (Easement) was recorded with Multnomah County to ensure protection of human health. The Easement restricts site use to intermittent railroad track uses and maintenance activities, except upon prior written approval from DEQ and further cleanup or re-evaluation of the site risk.
9. Because petroleum or lead contaminated soil is considered a solid waste and may pose a threat to the environment under different site conditions, any contaminated soil excavated from the site in the future should be managed as a solid waste and properly disposed.

Current site conditions are protective of public health and the environment. No further action is required for the site, under Oregon Environmental Cleanup Law, ORS 465.200 et seq., unless additional information becomes available which warrants further investigation. The site will remain on DEQ's Confirmed Release List and Inventory of sites based on the conditions of the Easement. DEQ's Environmental Cleanup Site Information database (ECSI) will be updated to reflect this decision.

Thank you for your participation in the Voluntary Cleanup Program. If you have any questions about this determination, you may contact the Project Manager, Tom Roick at 503-229-5502.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim Anderson", with a stylized, flowing script.

Jim Anderson, Manager
Portland Harbor Section

cc: Tom Roick, DEQ NWR
Mark Leece, CH2MHill
Anne Summers, Port of Portland